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PATENT APPLICATION

ATTORNEY DOCKET NO. 200310816-1

IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s):	**Debargha Mukherjee et al.**	**Confirmation No.:**	**1159**
Application No.:	**10/724,284**	**Examiner:**	**Kevin T. Bates**
Filing Date:	**Nov. 26, 2003**	**Group Art Unit:**	**2456**

Title: METHOD AND APPARATUS FOR REPLYING RECEIVING ATTRIBUTES USING CONSTRAINTS

Mail Stop Appeal Brief-Patents
Commissioner For Patents
PO Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL OF APPEAL BRIEF

Transmitted herewith is the Appeal Brief in this application with respect to the Notice of Appeal filed on June 3, 2009.

☒ The fee for filing this Appeal Brief is $540.00 (37 CFR 41.20).

☐ No Additional Fee Required.

(complete (a) or (b) as applicable)

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136(a) apply.

☒ (a) Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)-(d)) for the total number of months checked below:

☒	1st Month $130	☐	2nd Month $490	☐	3rd Month $1110	☐	4th Month $1730

☐ The extension fee has already been filed in this application.

☐ (b) Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

Please charge to Deposit Account 08-2025 the sum of $ 670. At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account 08-2025 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 08-2025 under 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees.

Respectfully submitted,

Debargha Mukherjee et al.

By /Christopher P. Kosh/

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant:	Debargha Mukherjee et al.	Examiner: Kevin T. Bates
Serial No.:	10/724,284	Group Art Unit: 2456
Filed:	Nov. 26, 2003	Docket No.: 200310816-1
Title:	METHOD AND APPARATUS FOR APPLYING RECEIVING ATTRIBUTES USING CONSTRAINTS	

APPEAL BRIEF UNDER 37 C.F.R. §41.37

Mail Stop Appeal Brief – Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir/Madam:

This Appeal Brief is submitted in support of the Notice of Appeal filed on June 3, 2009, appealing the final rejection of claims 11-19, 33, 34 and 37-44 of the above-identified application as set forth in the Final Office Action mailed April 3, 2009.

The U.S. Patent and Trademark Office is hereby authorized to charge Deposit Account No. 08-2025 in the amount of $540.00 for filing a Brief in Support of an Appeal as set forth under 37 C.F.R. §41.20(b)(2). At any time during the pendency of this application, please charge any required fees or credit any overpayment to Deposit Account No. 08-2025.

Appellant respectfully requests consideration and reversal of the Examiner's rejection of pending claims 11-19, 33, 34, and 37-44.

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REAL PARTY IN INTEREST

The real party in interest is Hewlett-Packard Development Company, LP having a principal place of business at 20555 S.H. 249 Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC.

RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to Appellant that will have a bearing on the Board's decision in the present Appeal.

STATUS OF CLAIMS

In a Final Office Action mailed April 3, 2009, claims 11-19, 33, 34, and 37-44 were finally rejected. Claims 11-19, 33, 34 and 37-44 are pending in the application and are the subject of the present Appeal. Claims 1-10, 20-32, 35, and 36 have been canceled without prejudice as to the subject matter contained therein.

STATUS OF AMENDMENTS

No amendments have been entered subsequent to the Final Office Action mailed April 3, 2009.

SUMMARY OF THE CLAIMED SUBJECT MATTER

The Summary is set forth as an exemplary embodiment as the language corresponding to independent claims 11, 33, and 34. Discussions about elements of claims 11, 33, and 34 can be found at least at the cited locations in the specification and drawings.

Independent claim 11 claims a machine-implemented method (Fig. 6 through Fig. 13; Figs. 25A-25B; p. 6, lines 1-26; p. 20, line 8 to p. 22, line 12; p. 27, line 1 to p. 29, line 22; and p. 43, line 20 to p. 44, line 10), comprising:

receiving a scalable encoded bitstream comprising scalable encoded media data and values of non-media-type-specific scalability attribute variables defining different adaptation points of the scalable encoded media data (Fig. 6 (ref. no. 60); Fig. 7 (ref. no. 70); Fig. 25A (ref. no. 2501); Fig. 25B (ref. no. 2521); p. 20, line 8 to p. 22, line 12; p. 27, line 1 to p. 29, line 22; and p. 43, line 20 to p. 44, line 10);

obtaining receiving attributes for a destination of an outbound version of the scalable encoded bitstream, wherein ones of the receiving attributes define explicit constraints on the outbound version of the scalable encoded bitstream in terms of respective functions of ones of the scalability attribute variables (Fig. 6 (ref. no. 61); Fig. 7 (ref. no. 71); Fig. 25A (ref. no. 2501); Fig. 25B (ref. no. 2521); p. 20, line 8 to p. 22, line 12; p. 27, line 1 to p. 29, line 22; and p. 43, line 20 to p. 44, line 10);

determining values of adaptation measures from respective evaluations of the functions based on the values of the ones of the scalability attribute variables (Fig. 6 (ref. no. 62); Fig. 7 (ref. no. 72); Fig. 25B (ref. no. 2522); p. 20, line 8 to p. 22, line 12; p. 27, line 1 to p. 29, line 22; and p. 43, line 20 to p. 44, line 10);

ascertaining a set of one or more candidate ones of the adaptation points of based on imposition of the constraints on the determined values of the adaptation measures (Fig. 6 (ref. no. 62); Fig. 7 (ref. no. 72); p. 20, line 8 to p. 22, line 12; p. 27, line 1 to p. 29, line 22; and p. 43, line 20 to p. 44, line 10);

selecting an adaptation point from the set of candidate adaptation points without regard to the scalable encoded media data (Fig. 6 (ref. no. 62); Fig. 7 (ref. no. 72); p. 20, line 8 to p. 22, line 12; p. 27, line 1 to p. 29, line 22; and p. 43, line 20 to p. 44, line 10); and

transcoding the scalable bit stream in accordance with the selected adaptation point to produce the outbound version of the scalable encoded bitstream (Fig. 6 (ref. no. 62); Fig. 7 (ref. no. 72); p. 20, line 8 to p. 22, line 12; p. 27, line 1 to p. 29, line 22; and p. 43, line 20 to p. 44, line 10).

Independent claim 33 claims a transcoder (Fig. 8 (ref. no. 81); Fig. 9 (ref. nos. 90, 91, and 92); Fig. 10 (ref. no. 100); Fig. 11 (ref. nos. 1102 and 1103); Fig. 12 (ref. no. 1202); Fig. 13 (ref. no. 1202); p. 23, line 16 to p. 28, line 27; and p. 27, line 1 to p. 29, line 22; and p. 43, line 20 to p. 44, line 10), comprising:

an input that receives a scalable encoded bitstream comprising scalable encoded media data and a resource description comprising values of non-media-type-specific scalability attribute variables defining different adaptation points of the scalable encoded media data, wherein the input additionally receives receiving attributes for a destination of an outbound version of the scalable encoded bitstream, wherein ones of the receiving attributes define explicit constraints on the outbound version of the scalable encoded bitstream in terms of respective functions of ones of the scalability attribute variables (Fig. 6 (ref. nos. 60 and 61); Fig. 7 (ref. nos. 70 and 71); Fig. 8 through Fig. 13; p. 20, line 8 to p. 22, line 12; p. 23, line 16 to p. 28, line 27; p. 27, line 1 to p. 29, line 22; and p. 43, line 20 to p. 44, line 10);

an optimizer that determines values of adaptation measures from respective evaluations of the functions based on the values of the ones of the scalability attribute variables, ascertains a set of one or more candidate ones of the adaptation points of based on imposition of the constraints on the determined values of the adaptation measures, and selects an adaptation point from the set of candidate adaptation points without regard to the scalable encoded media data (Fig. 6 (ref. no. 62); Fig. 7 (ref. no. 72); Fig. 8 through Fig. 13; p. 20, line 8 to p. 22, line 12; p. 23, line 16 to p. 28, line 27; p. 27, line 1 to p. 29, line 22; and p. 43, line 20 to p. 44, line 10); and

a resource adaptation engine that transcodes the scalable bit stream in accordance with the selected adaptation point to produce the outbound version of the scalable encoded bitstream (Fig. 6 (ref. no. 62); Fig. 7 (ref. no. 73); Fig. 8 through Fig. 13; p. 20, line 8 to p.

22, line 12; p. 23, line 16 to p. 28, line 27; p. 27, line 1 to p. 29, line 22; and p. 43, line 20 to p. 44, line 10).

Independent claim 34 claims a computer system (Fig. 8 through Fig. 13; p. 23, line 16 to p. 28, line 27; p. 27, line 1 to p. 29, line 22; and p. 43, line 20 to p. 44, line 10), comprising:

a memory (Fig. 8 (ref. no. 81); Fig. 9 (ref. nos. 90, 91, and 92); Fig. 10 (ref. no. 100); Fig. 11 (ref. nos. 1102 and 1103); Fig. 12 (ref. no. 1202); Fig. 13 (ref. no. 1202); p. 23, line 16 to p. 28, line 27; and p. 27, line 1 to p. 29, line 22); and

a transcoder that performs operations (Fig. 8 (ref. no. 81); Fig. 9 (ref. nos. 90, 91, and 92); Fig. 10 (ref. no. 100); Fig. 11 (ref. nos. 1102 and 1103); Fig. 12 (ref. no. 1202); Fig. 13 (ref. no. 1202); p. 23, line 16 to p. 28, line 27; and p. 27, line 1 to p. 29, line 22) comprising

receiving a scalable encoded bitstream comprising scalable encoded media data and values of non-media-type-specific scalability attribute variables defining different adaptation points of the scalable encoded media data (Fig. 6 (ref. no. 60); Fig. 7 (ref. no. 70); Fig. 25A (ref. no. 2501); Fig. 25B (ref. no. 2521); p. 20, line 8 to p. 22, line 12; p. 27, line 1 to p. 29, line 22; and p. 43, line 20 to p. 44, line 10),

obtaining receiving attributes for a destination of an outbound version of the scalable encoded bitstream, wherein ones of the receiving attributes define explicit constraints on the outbound version of the scalable encoded bitstream in terms of respective functions of ones of the scalability attribute variables (Fig. 6 (ref. no. 61); Fig. 7 (ref. no. 71); Fig. 25A (ref. no. 2501); Fig. 25B (ref. no. 2521); p. 20, line 8 to p. 22, line 12; p. 27, line 1 to p. 29, line 22; and p. 43, line 20 to p. 44, line 10);

determining values of adaptation measures from respective evaluations of the functions based on the values of the ones of the scalability attribute variables (Fig. 6 (ref. no. 62); Fig. 7 (ref. no. 72); Fig. 25B (ref. no.

2522); p. 20, line 8 to p. 22, line 12; p. 27, line 1 to p. 29, line 22; and p. 43, line 20 to p. 44, line 10);

ascertaining a set of one or more candidate ones of the adaptation points of based on imposition of the constraints on the determined values of the adaptation measures (Fig. 6 (ref. no. 62); Fig. 7 (ref. no. 72); p. 20, line 8 to p. 22, line 12; p. 27, line 1 to p. 29, line 22; and p. 43, line 20 to p. 44, line 10);

selecting an adaptation point from the set of candidate adaptation points without regard to the scalable encoded media data (Fig. 6 (ref. no. 62); Fig. 7 (ref. no. 72); p. 20, line 8 to p. 22, line 12; p. 27, line 1 to p. 29, line 22; and p. 43, line 20 to p. 44, line 10), and

transcoding the scalable bit stream in accordance with the selected adaptation point to produce a scaled version of the scalable encoded bitstream (Fig. 6 (ref. no. 62); Fig. 7 (ref. no. 72); p. 20, line 8 to p. 22, line 12; p. 27, line 1 to p. 29, line 22; and p. 43, line 20 to p. 44, line 10).

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 11-19, 33, 34, and 37-44 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,953,506 (hereafter "Kalra") in view of Debargha Mukherjee et al, Proposals for end-to-end Digital Item Adaptatin using Structured Scalable Meta-formats (SSM) (hereafter "Mukherjee-Proposals").

ARGUMENT

I. The Applicable Law

A. 35 U.S.C. §120.

"An application for patent for an invention disclosed in the manner provided by the first paragraph of section 112 of this title in an application previously filed in the United States … which is filed by an inventor or inventors named in the previously filed application shall have the same effect, as to such invention, as though filed on the date of the prior application, if filed before the patenting or abandonment of or termination of proceedings on the first application or on an application similarly entitled to the benefit of the filing date of the first application and if it contains or is amended to contain a specific reference to the earlier filed application." 35 U.S.C. §120.

B. 35 U.S.C. §103.

The Examiner has the burden under 35 U.S.C. §103 to establish a *prima facie* case of obviousness. *In re Fine,* 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). The prior art reference or combined prior art references must teach or suggest all of the claim limitations. *In re Royka,* 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "[A] patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art." KSR Int'l Co. v. Teleflex Inc., 127 S.Ct. 1727, 1741 (2007).

II. Rejection of Claims 11-19, 33, 34, and 37-44 under 35 U.S.C. §103(a) as being unpatentable over Kalra in view of Mukherjee

A. Rejection of Claims 11-18, 33, 34, 37, and 44 under 35 U.S.C. §103(a) as being unpatentable over Kalra in view of Mukherjee

Mukherjee does not qualify as prior art for at least claims 11-18, 33, 34, 37, and 44.

The present application claims priority to U.S. Patent Application No. 10/196,506, entitled "System, Method, and Format thereof For Scalable Encoded Media Delivery," inventors Debargha Mukherjee et al., filed July 15, 2002. U.S. Patent Application No. 10/196,506 has issued as U.S. Patent No. 7,133,925 (hereafter "Mukherjee-'925").

Mukherjee-Proposals is believed to have a prior art date of October 2002.

As demonstrated by the following claim charts, claims 11-18, 33, 34, 37, and 44 are disclosed in the manner provided by the first paragraph of 35 U.S.C. §112 by Mukherjee-'925 and are therefore entitled to a priority date of July 15, 2002 (i.e., the filing date of Mukherjee-'925). Because the filing date of Mukherjee-'925 of July 15, 2002 predates the prior art date of October 2002 Mukherjee-Proposals, Mukherjee-Proposals does not qualify as prior art for at least claims 11-18, 33, 34, 37, and 44.

1. Rejection of Claim 11 under 35 U.S.C. §103(a) as being unpatentable over Kalra in view of Mukherjee

Claim 11 is disclosed in the manner provided by the first paragraph of 35 U.S.C. §112 by Mukherjee-'925 as follows.

Claim 11	Citations to Mukherjee-'925
11. A machine-implemented method, comprising:	Fig. 6 through Fig. 10; col. 10, line 44 to col. 12, line 6. See also, Abstract; and col. 3, lines 1-41.
receiving a scalable encoded bitstream comprising scalable encoded media data and values of non-media-type-specific scalability attribute variables defining	Fig. 6 (ref. no. 60); Fig. 7 (ref. no. 70); col. 10, line 44 to col. 12, line 6. See also, Abstract; and col. 3, lines 1-41.

different adaptation points of the scalable encoded media data;	
obtaining receiving attributes for a destination of an outbound version of the scalable encoded bitstream, wherein ones of the receiving attributes define explicit constraints on the outbound version of the scalable encoded bitstream in terms of respective functions of ones of the scalability attribute variables;	Fig. 6 (ref. no. 61); Fig. 7 (ref. no. 71); col. 10, line 44 to col. 12, line 6. See also, Abstract; and col. 3, lines 1-41.
determining values of adaptation measures from respective evaluations of the functions based on the values of the ones of the scalability attribute variables;	Fig. 6 (ref. no. 62); Fig. 7 (ref. no. 72); col. 10, line 44 to col. 12, line 6. See also, Abstract; and col. 3, lines 1-41.
ascertaining a set of one or more candidate ones of the adaptation points of based on imposition of the constraints on the determined values of the adaptation measures;	Fig. 6 (ref. no. 62); Fig. 7 (ref. no. 72); col. 10, line 44 to col. 12, line 6. See also, Abstract; and col. 3, lines 1-41.
selecting an adaptation point from the set of candidate adaptation points without regard to the scalable encoded media data; and	Fig. 6 (ref. no. 62); Fig. 7 (ref. no. 72); col. 10, line 44 to col. 12, line 6. See also, Abstract; and col. 3, lines 1-41.
transcoding the scalable bit stream in accordance with the selected adaptation point to produce the outbound version of the scalable encoded bitstream.	Fig. 6 (ref. no. 62); Fig. 7 (ref. no. 73); col. 10, line 44 to col. 12, line 6. See also, Abstract; and col. 3, lines 1-41.

Based on the above, Mukherjee does not qualify as prior art for claim 11. The Examiner concedes that Kalra does not teach or suggest all of the features of claim 11. Final

Office Action, p. 3. Accordingly, Appellant respectfully requests that the rejection of claim 11 under 35 U.S.C. §103(a) be reversed.

2. Rejection of Claim 12 under 35 U.S.C. §103(a) as being unpatentable over Kalra in view of Mukherjee

Claim 12 is disclosed in the manner provided by the first paragraph of 35 U.S.C. §112 by Mukherjee-'925 as follows.

Claim 12	Citations to Mukherjee-'925
12. The method of claim 11, wherein the determining comprises determining the value of at least one of the adaptation measures based at least in part on a multivariate function defined by a respective one of the receiving attributes and comprising a linear combination of products of univariate functions of ones of the scalability attribute variables.	Fig. 6 (ref. no. 62); Fig. 7 (ref. no. 72); and col. 11, lines 3-6.

Based on the above, Mukherjee does not qualify as prior art for claim 12. The Examiner concedes that Kalra does not teach or suggest all of the features of claim 12. Final Office Action, p. 3. Accordingly, Appellant respectfully requests that the rejection of claim 12 under 35 U.S.C. §103(a) be reversed.

3. Rejection of Claim 13 under 35 U.S.C. §103(a) as being unpatentable over Kalra in view of Mukherjee

Claim 13 is disclosed in the manner provided by the first paragraph of 35 U.S.C. §112 by Mukherjee-'925 as follows.

Claim 13	Citations to Mukherjee-'925
13. The method of claim 12, wherein the ascertaining comprises comparing the at least one adaptation measure to at least one constraint defined by a respective one of the receiving attributes.	Fig. 6 (ref. no. 62); Fig. 7 (ref. no. 72); col. 10, line 57 to col. 11, line 3; col. 11, lines 26-52; col. 12, lines 1-2; col. 12, lines 15-31; and col. 12, lines 43-51.

Based on the above, Mukherjee does not qualify as prior art for claim 13. The Examiner concedes that Kalra does not teach or suggest all of the features of claim 13. Final Office Action, p. 3. Accordingly, Appellant respectfully requests that the rejection of claim 13 under 35 U.S.C. §103(a) be reversed.

4. Rejection of Claim 14 under 35 U.S.C. §103(a) as being unpatentable over Kalra in view of Mukherjee

Claim 14 is disclosed in the manner provided by the first paragraph of 35 U.S.C. §112 by Mukherjee-'925 as follows.

Claim 14	Citations to Mukherjee-'925
14. The method of claim 11, wherein the ascertaining comprises comparing ones of the adaptation measures to respective limit constraints defined by respective ones of the receiving attributes.	Fig. 6 (ref. no. 62); Fig. 7 (ref. no. 72); col. 10, line 57 to col. 11, line 3; col. 11, lines 26-52; col. 12, lines 1-2; and col. 12, lines 15-31.

Based on the above, Mukherjee does not qualify as prior art for claim 14. The Examiner concedes that Kalra does not teach or suggest all of the features of claim 14. Final Office Action, p. 3. Accordingly, Appellant respectfully requests that the rejection of claim 14 under 35 U.S.C. §103(a) be reversed.

5. Rejection of Claim 15 under 35 U.S.C. §103(a) as being unpatentable over Kalra in view of Mukherjee

Claim 15 is disclosed in the manner provided by the first paragraph of 35 U.S.C. §112 by Mukherjee-'925 as follows.

Claim 15	Citations to Mukherjee-'925
15. The method of claim 11, wherein the selecting comprises comparing ones of the adaptation measures to optimization constraints defined by respective ones of the receiving attributes.	Fig. 6 (ref. no. 62); Fig. 7 (ref. no. 72); col. 10, line 57 to col. 11, line 3; col. 11, lines 26-52; col. 12, lines 1-2; and col. 12, lines 43-51.

Based on the above, Mukherjee does not qualify as prior art for claim 15. The Examiner concedes that Kalra does not teach or suggest all of the features of claim 15. Final Office Action, p. 3. Accordingly, Appellant respectfully requests that the rejection of claim 15 under 35 U.S.C. §103(a) be reversed.

6. Rejection of Claim 16 under 35 U.S.C. §103(a) as being unpatentable over Kalra in view of Mukherjee

Claim 16 is disclosed in the manner provided by the first paragraph of 35 U.S.C. §112 by Mukherjee-'925 as follows.

Claim 16	Citations to Mukherjee-'925
16. The method of claim 13, wherein the products comprise product terms and the determining comprises evaluating the multivariate function based on ones of the receiving attributes specifying at least one of: a number of product terms in the	Fig. 6 (ref. no. 62); Fig. 7 (ref. no. 72); and col. 11, lines 8-26.

linear combination; a number of elements in each product term; attribute codes for attributes in each product term; function codes for the univariate functions of the attribute values; and multipliers for the linear combination.	

Based on the above, Mukherjee does not qualify as prior art for claim 16. The Examiner concedes that Kalra does not teach or suggest all of the features of claim 16. Final Office Action, p. 3. Accordingly, Appellant respectfully requests that the rejection of claim 16 under 35 U.S.C. §103(a) be reversed.

7. Rejection of Claim 17 under 35 U.S.C. §103(a) as being unpatentable over Kalra in view of Mukherjee

Claim 17 is disclosed in the manner provided by the first paragraph of 35 U.S.C. §112 by Mukherjee-'925 as follows.

Claim 17	Citations to Mukherjee-'925
17. The method of claim 14, wherein the ascertaining comprises comparing ones of the adaptation measures to ones of the limit constraints specifying for at least one of one of the adaptation measures at least one of a maximum value and a minimum value supportable by the destination.	Fig. 6 (ref. no. 62); Fig. 7 (ref. no. 72); col. 10, line 57 to col. 11, line 3; col. 11, lines 26-52; col. 12, lines 1-2; and col. 12, lines 15-31.

Based on the above, Mukherjee does not qualify as prior art for claim 17. The Examiner concedes that Kalra does not teach or suggest all of the features of claim 17. Final Office Action, p. 3. Accordingly, Appellant respectfully requests that the rejection of claim 17 under 35 U.S.C. §103(a) be reversed.

8. Rejection of Claim 18 under 35 U.S.C. §103(a) as being unpatentable over Kalra in view of Mukherjee

Claim 18 is disclosed in the manner provided by the first paragraph of 35 U.S.C. §112 by Mukherjee-'925 as follows.

Claim 18	Citations to Mukherjee-'925
18. The method of claim 15, wherein the selecting comprises selecting the adaptation point in accordance with at least one of the optimization constraints specifying at least one of a maximization and a minimization of a respective one of the adaptation measures.	Fig. 6 (ref. no. 62); Fig. 7 (ref. no. 72); col. 10, line 57 to col. 11, line 3; col. 11, lines 26-52; col. 12, lines 1-2; and col. 12, lines 43-51.

Based on the above, Mukherjee does not qualify as prior art for claim 18. The Examiner concedes that Kalra does not teach or suggest all of the features of claim 18. Final Office Action, p. 3. Accordingly, Appellant respectfully requests that the rejection of claim 18 under 35 U.S.C. §103(a) be reversed.

9. Rejection of Claim 37 under 35 U.S.C. §103(a) as being unpatentable over Kalra in view of Mukherjee

Claim 37 is disclosed in the manner provided by the first paragraph of 35 U.S.C. §112 by Mukherjee-'925 as follows.

Claim 37	Citations to Mukherjee-'925

37. The method of claim 11, wherein the scalable encoded bitstream additionally comprises description metadata specifying a hierarchical model of the bitstream, and the transcoding further comprises adapting the description metadata to represent the structure of the outbound version of the scalable encoded bitstream.	Fig. 1 through Fig. 5C; and col. 5, line 32 to col. 10, line 43.

Based on the above, Mukherjee does not qualify as prior art for claim 37. The Examiner concedes that Kalra does not teach or suggest all of the features of claim 37. Final Office Action, p. 3. Accordingly, Appellant respectfully requests that the rejection of claim 37 under 35 U.S.C. §103(a) be reversed.

10. Rejection of Claim 44 under 35 U.S.C. §103(a) as being unpatentable over Kalra in view of Mukherjee

Claim 44 is disclosed in the manner provided by the first paragraph of 35 U.S.C. §112 by Mukherjee-'925 as follows.

Claim 44	Citations to Mukherjee-'925
44. The method of claim 11, wherein the receiving comprises receiving the scalable encoded bitstream from at least one remote network node, the obtaining comprises receiving the receiving attributes from at least one remote network node, and the scalable encoded bitstream and the receiving attributes are received from different from respective network nodes.	Fig. 8 through Fig. 10 (ref. no. 72); col. 13, line 52 to col. 14, line 48.

Based on the above, Mukherjee does not qualify as prior art for claim 44. The Examiner concedes that Kalra does not teach or suggest all of the features of claim 44. Final Office Action, p. 3. Accordingly, Appellant respectfully requests that the rejection of claim 44 under 35 U.S.C. §103(a) be reversed.

11. Rejection of Claim 33 under 35 U.S.C. §103(a) as being unpatentable over Kalra in view of Mukherjee

Claim 33 is disclosed in the manner provided by the first paragraph of 35 U.S.C. §112 by Mukherjee-'925 as follows.

Claim 33	Citations to Mukherjee-'925
33. A transcoder, comprising:	Fig. 8 (ref. no. 81); Fig. 9 (ref. nos. 90, 91, or 92); Fig. 10 (ref. no. 100); col. 13, line 52 to col. 14, line 48. See also, Abstract; and col. 3, lines 1-41.
an input that receives a scalable encoded bitstream comprising scalable encoded media data and a resource description comprising values of non-media-type-specific scalability attribute variables defining different adaptation points of the scalable encoded media data, wherein the input additionally receives receiving attributes for a destination of an outbound version of the scalable encoded bitstream, wherein ones of the receiving attributes define explicit constraints on the outbound version of the scalable encoded bitstream in terms of respective functions of ones of the	Fig. 6 (ref. nos. 60 and 61); Fig. 7 (ref. nos. 70 and 71); Fig. 8 through Fig. 10; col. 10, line 44 to col. 12, line 6; and col. 13, line 52 to col. 14, line 48. See also, Abstract; and col. 3, lines 1-41.

scalability attribute variables;	
an optimizer that determines values of adaptation measures from respective evaluations of the functions based on the values of the ones of the scalability attribute variables, ascertains a set of one or more candidate ones of the adaptation points of based on imposition of the constraints on the determined values of the adaptation measures, and selects an adaptation point from the set of candidate adaptation points without regard to the scalable encoded media data; and	Fig. 6 (ref. no. 62); Fig. 7 (ref. no. 72); Fig. 8 through Fig. 10; col. 10, line 44 to col. 11, line 63; and col. 13, line 52 to col. 14, line 48. See also, Abstract; and col. 3, lines 1-41.
a resource adaptation engine that transcodes the scalable bit stream in accordance with the selected adaptation point to produce the outbound version of the scalable encoded bitstream.	Fig. 6 (ref. no. 62); Fig. 7 (ref. no. 73); Fig. 8 through Fig. 10; col. 10, line 44 to col. 12, line 6; and col. 13, line 52 to col. 14, line 48. See also, Abstract; and col. 3, lines 1-41.

Based on the above, Mukherjee does not qualify as prior art for claim 33. The Examiner concedes that Kalra does not teach or suggest all of the features of claim 33. Final Office Action, p. 3. Accordingly, Appellant respectfully requests that the rejection of claim 33 under 35 U.S.C. §103(a) be reversed.

12. Rejection of Claim 34 under 35 U.S.C. §103(a) as being unpatentable over Kalra in view of Mukherjee

Claim 34 is disclosed in the manner provided by the first paragraph of 35 U.S.C. §112 by Mukherjee-'925 as follows.

Claim 34	Citations to Mukherjee-'925
34. A computer system, comprising:	Fig. 8 through Fig. 10; col. 13, line 52 to col. 14, line 48. See also, Abstract; and col. 3, lines 1-41.
a memory; and	Fig. 8 (ref. no. 81); Fig. 9 (ref. nos. 90, 91, or 92); Fig. 10 (ref. no. 100); col. 13, line 52 to col. 14, line 48. See also, Abstract; and col. 3, lines 1-41.
a transcoder that performs operations comprising	Fig. 8 (ref. no. 81); Fig. 9 (ref. nos. 90, 91, or 92); Fig. 10 (ref. no. 100); col. 13, line 52 to col. 14, line 48. See also, Abstract; and col. 3, lines 1-41.
receiving a scalable encoded bitstream comprising scalable encoded media data and values of non-media-type-specific scalability attribute variables defining different adaptation points of the scalable encoded media data,	Fig. 6 (ref. no. 60); Fig. 7 (ref. no. 70); col. 10, line 44 to col. 12, line 6. See also, Abstract; and col. 3, lines 1-41.
obtaining receiving attributes for a destination of an outbound version of the scalable encoded bitstream, wherein ones of the receiving attributes define	Fig. 6 (ref. no. 61); Fig. 7 (ref. no. 71); col. 10, line 44 to col. 12, line 6. See also, Abstract; and col. 3, lines 1-41.

explicit constraints on the outbound version of the scalable encoded bitstream in terms of respective functions of ones of the scalability attribute variables;	
determining values of adaptation measures from respective evaluations of the functions based on the values of the ones of the scalability attribute variables;	Fig. 6 (ref. no. 62); Fig. 7 (ref. no. 72); col. 10, line 44 to col. 11, line 63. See also, Abstract; and col. 3, lines 1-41.
ascertaining a set of one or more candidate ones of the adaptation points of based on imposition of the constraints on the determined values of the adaptation measures;	Fig. 6 (ref. no. 62); Fig. 7 (ref. no. 72); col. 10, line 44 to col. 12, line 6. See also, Abstract; and col. 3, lines 1-41.
selecting an adaptation point from the set of candidate adaptation points without regard to the scalable encoded media data, and	Fig. 6 (ref. no. 62); Fig. 7 (ref. no. 72); col. 10, line 44 to col. 12, line 6. See also, Abstract; and col. 3, lines 1-41.
transcoding the scalable bit	Fig. 6 (ref. no. 62); Fig. 7 (ref. no. 73); col.

	stream in accordance with the selected adaptation point to produce a scaled version of the scalable encoded bitstream.	10, line 44 to col. 12, line 6. See also, Abstract; and col. 3, lines 1-41.

Based on the above, Mukherjee does not qualify as prior art for claim 34. The Examiner concedes that Kalra does not teach or suggest all of the features of claim 34. Final Office Action, p. 3. Accordingly, Appellant respectfully requests that the rejection of claim 34 under 35 U.S.C. §103(a) be reversed.

B. Rejection of Claims 19 and 38-43 under 35 U.S.C. §103(a) as being unpatentable over Kalra in view of Mukherjee

The Examiner has failed to set forth a *prima facie* case of obviousness under 35 U.S.C. §103 for claims 19 and 38-43.

1. Rejection of Claim 19 under 35 U.S.C. §103(a) as being unpatentable over Kalra in view of Mukherjee

Claim 19 recites "wherein the determining comprises determining at least one of the adaptation measures based at least in part on an evaluation of a stack function comprising operators, and variables corresponding to ones of the scalability attributes."

The Examiner cites, without explanation, col. 17, lines 15-55 of Kalra as a teaching or suggestion of this feature of claim 19. Appellant is unable to locate any teaching or suggestion of "an evaluation of a stack function" as recited in claim 19 in this citation of Kalra.

Because the Examiner has not identified a teaching or suggestion of this feature of claim 19 in Kalra or Mukherjee-Proposals, Appellant respectfully submits that the Examiner has not set forth a *prima facie* case of obviousness under 35 U.S.C. §103 for claim 19. Accordingly, Appellant respectfully requests that the rejection of claim 19 under 35 U.S.C. §103(a) be reversed.

2. Rejection of Claims 38-43 under 35 U.S.C. §103(a) as being unpatentable over Kalra in view of Mukherjee

Claim 38 recites "wherein the scalable encoded bitstream specifies combination variables in terms of respective ordered lists of ones of numeric constants, variables, arguments, and operators; and further comprising evaluating each of the combination variables, wherein the evaluating comprising pushing the respective ordered list onto a respective expression stack."

To combine Mukherjee-Proposals with Kalra, the Examiner states that "[i]t would have been obvious to one of ordinary skill in the art at the time the invention was made to

allow the constraints to be programmed by the media stream creator to allow a wide variety of stream formats to be processed by the transcoders." Final Office Action, p. 6.

The rationale set forth by the Examiner fails to justify the combination of Kalra and Mukherjee-Proposals. The Examiner fails to explain how the concept of allowing constraints to be programmed by a media stream creator relates, in any way, to "evaluating each of the combination variables, wherein the evaluating comprising pushing the respective ordered list onto a respective expression stack" as recited in claim 38. As a result, the Examiner's rationale would not lead one of ordinary skill in the art at the time the invention was made to combine the evaluation of combination variables of Mukherjee-Proposals with Kalra.

Appellant respectfully submits that the Examiner has not set forth a *prima facie* case of obviousness under 35 U.S.C. §103 for claim 38 for the above reasons. Accordingly, Appellant respectfully requests that the rejection of claim 19 under 35 U.S.C. §103(a) be reversed.

CONCLUSION

For the above reasons, Appellant respectfully submits that claims 11-19, 33, 34, and 37-44 of the pending Application have not been established to be obvious in view of the cited references. Accordingly, Appellant respectfully requests that the Examiner be reversed.

Any inquiry regarding this Response should be directed to Denise Saffold at Telephone No. (650) 236-4868 or Christopher P. Kosh at Telephone No. (512) 241-2403. In addition, all correspondence should continue to be directed to the following address:

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CLAIMS APPENDIX

1-10. (Canceled)

11. (Previously Presented): A machine-implemented method, comprising:

receiving a scalable encoded bitstream comprising scalable encoded media data and values of non-media-type-specific scalability attribute variables defining different adaptation points of the scalable encoded media data;

obtaining receiving attributes for a destination of an outbound version of the scalable encoded bitstream, wherein ones of the receiving attributes define explicit constraints on the outbound version of the scalable encoded bitstream in terms of respective functions of ones of the scalability attribute variables;

determining values of adaptation measures from respective evaluations of the functions based on the values of the ones of the scalability attribute variables;

ascertaining a set of one or more candidate ones of the adaptation points of based on imposition of the constraints on the determined values of the adaptation measures;

selecting an adaptation point from the set of candidate adaptation points without regard to the scalable encoded media data; and

transcoding the scalable bit stream in accordance with the selected adaptation point to produce the outbound version of the scalable encoded bitstream.

12. (Previously Presented): The method of claim 11, wherein the determining comprises determining the value of at least one of the adaptation measures based at least in part on a multivariate function defined by a respective one of the receiving attributes and comprising a linear combination of products of univariate functions of ones of the scalability attribute variables.

13. (Previously Presented): The method of claim 12, wherein the ascertaining comprises comparing the at least one adaptation measure to at least one constraint defined by a respective one of the receiving attributes.

14. (Previously Presented): The method of claim 11, wherein the ascertaining comprises comparing ones of the adaptation measures to respective limit constraints defined by respective ones of the receiving attributes.

15. (Previously Presented): The method of claim 11, wherein the selecting comprises comparing ones of the adaptation measures to optimization constraints defined by respective ones of the receiving attributes.

16. (Previously Presented): The method of claim 13, wherein the products comprise product terms and the determining comprises evaluating the multivariate function based on ones of the receiving attributes specifying at least one of:

a number of product terms in the linear combination;

a number of elements in each product term;

attribute codes for attributes in each product term;

function codes for the univariate functions of the attribute values; and

multipliers for the linear combination.

17. (Previously Presented): The method of claim 14, wherein the ascertaining comprises comparing ones of the adaptation measures to ones of the limit constraints specifying for at least one of one of the adaptation measures at least one of a maximum value and a minimum value supportable by the destination.

18. (Previously Presented): The method of claim 15, wherein the selecting comprises selecting the adaptation point in accordance with at least one of the optimization constraints specifying at least one of a maximization and a minimization of a respective one of the adaptation measures.

19. (Previously Presented): The method of claim 11, wherein the determining comprises determining at least one of the adaptation measures based at least in part on an

evaluation of a stack function comprising operators, and variables corresponding to ones of the scalability attributes.

20-32. (Canceled)

33. (Previously Presented): A transcoder, comprising:

an input that receives a scalable encoded bitstream comprising scalable encoded media data and a resource description comprising values of non-media-type-specific scalability attribute variables defining different adaptation points of the scalable encoded media data, wherein the input additionally receives receiving attributes for a destination of an outbound version of the scalable encoded bitstream, wherein ones of the receiving attributes define explicit constraints on the outbound version of the scalable encoded bitstream in terms of respective functions of ones of the scalability attribute variables;

an optimizer that determines values of adaptation measures from respective evaluations of the functions based on the values of the ones of the scalability attribute variables, ascertains a set of one or more candidate ones of the adaptation points of based on imposition of the constraints on the determined values of the adaptation measures, and selects an adaptation point from the set of candidate adaptation points without regard to the scalable encoded media data; and

a resource adaptation engine that transcodes the scalable bit stream in accordance with the selected adaptation point to produce the outbound version of the scalable encoded bitstream.

34. (Previously Presented): A computer system, comprising:

a memory; and

a transcoder that performs operations comprising

receiving a scalable encoded bitstream comprising scalable encoded media data and values of non-media-type-specific scalability attribute variables defining different adaptation points of the scalable encoded media data,

obtaining receiving attributes for a destination of an outbound version of the scalable encoded bitstream, wherein ones of the receiving attributes define explicit constraints on the outbound version of the scalable encoded bitstream in terms of respective functions of ones of the scalability attribute variables;

determining values of adaptation measures from respective evaluations of the functions based on the values of the ones of the scalability attribute variables;

ascertaining a set of one or more candidate ones of the adaptation points of based on imposition of the constraints on the determined values of the adaptation measures;

selecting an adaptation point from the set of candidate adaptation points without regard to the scalable encoded media data, and

transcoding the scalable bit stream in accordance with the selected adaptation point to produce a scaled version of the scalable encoded bitstream.

35 and 36. (canceled)

37. (Previously Presented): The method of claim 11, wherein the scalable encoded bitstream additionally comprises description metadata specifying a hierarchical model of the bitstream, and the transcoding further comprises adapting the description metadata to represent the structure of the outbound version of the scalable encoded bitstream.

38. (Previously Presented): The method of claim 11, wherein the scalable encoded bitstream specifies combination variables in terms of respective ordered lists of ones of numeric constants, variables, arguments, and operators; and further comprising evaluating each of the combination variables, wherein the evaluating comprising pushing the respective ordered list onto a respective expression stack.

39. (Previously Presented): The method of claim 38, wherein

the pushing comprises pushing each constant into the respective expression stack, and

the pushing of each constant comprises pushing a real numeric element corresponding to the constant into the respective expression stack.

40. (Previously Presented): The method of claim 38, wherein

the pushing comprises pushing each variable into the respective expression stack, and

the pushing of each variable comprises determining a numeric value of the variable for a set of adaptation points and pushing the determining numeric value into the respective expression stack.

41. (Previously Presented): The method of claim 38, wherein

the pushing comprises pushing one or more unary operators into the respective expression stack, and

in response to pushing each unary operator into the respective expression stack, popping the unary operator and a successive top numeric stack element out of the respective expression stack, determining a result from the popped unary operator and numeric stack element, and pushing the result into the respective expression stack.

42. (Previously Presented): The method of claim 38, wherein

the pushing comprises pushing one or more binary operators in the respective expression stack, and

in response to pushing each binary operator into the respective expression stack, popping the binary operator and two successive top numeric stack elements out of the respective expression stack, determining a result from the popped binary operator and the two numeric stack elements, and pushing the result into the respective expression stack.

43. (Previously Presented): The method of claim 38, further comprising

calling each of the combination variables specifying a number of arguments, and

in response to each calling of a respective one of the combination variables, serially popping the specified number of top elements from the respective expression stack, and determining a value of the combination variable from the popped elements.

44. (Previously Presented): The method of claim 11, wherein the receiving comprises receiving the scalable encoded bitstream from at least one remote network node, the obtaining comprises receiving the receiving attributes from at least one remote network node, and the scalable encoded bitstream and the receiving attributes are received from different from respective network nodes.

EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

None.